



SRTS

Stress
Resilience
Training
System



USER MANUAL

U.S. NAVY
EDITION



SRTS

Stress
Resilience
Training
System



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SYSTEM REQUIREMENTS



MINIMUM

- » Windows XP/Vista/Windows 7 operating system
- » 2.0 GHz Processor
- » 128MB OpenGL video card
- » 1GB RAM
- » DVD-Rom drive
- » 8GB of disk space



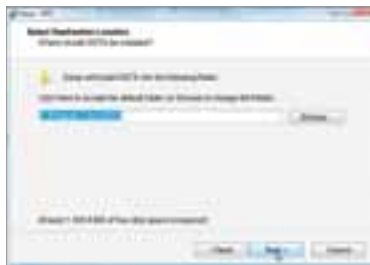
RECOMMENDED

- » Windows XP/Vista/Windows 7 operating system
- » Dual 2.0 GHz Processor
- » 128MB OpenGL video card
- » 2GB RAM
- » DVD-Rom drive
- » 8GB of disk space

INSTALLATION



Install SRTS window



Destination location window



WINDOWS XP

1. Insert the SRTS DVD in your DVD-Rom drive. The DVD will open using Autorun.
2. Click "Next" to view the End User License Agreement. In order to install SRTS, you will need to select "I Accept the Agreement," then click "Next" again.
3. The default destination folder for SRTS is C:\Program Files\SRTS, but you can select the "Custom" option to install the game in the directory of your choice. Select either the "Default" or "Custom" option, and click "Next" to continue.
4. To start the program, select "SRTS" from the program group in the Windows start menu.



WINDOWS VISTA AND WINDOWS 7

1. Insert the SRTS DVD in your DVD-Rom drive. Autoplay should open a window.

Note: If no window opens, Open your DVD drive and double click the "Setup" file and follow the steps to install. Most computers will display this file as "Setup," but the file extension may also be displayed as "Setup.exe."

2. Once you've started the Setup process, select "Next" to view the End User License Agreement. Click "I Accept the Agreement," then select "Next" again.
3. The default destination folder for SRTS is C:\Program Files\SRTS, but you can select the "Browse" option to install the game in the directory of your choice. Once you've decided on a location, select "Next" to begin the installation process.
4. To start the program, select "SRTS" from the program group in the Windows start menu.

Note: SRTS uses a network protocol to allow it to read your Coherence. It also allows SRTS to check for updates. To allow this communication to take place, click "Allow Access" or "Unblock," depending on which Windows operating system you're using.

INTRODUCTION



WELCOME TO THE STRESS RESILIENCE TRAINING SYSTEM (SRTS)

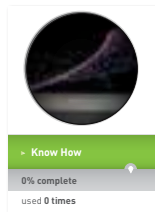


The SRTS software is an important training tool that teaches you to build resilience to the stresses of military life. What you learn using SRTS will enhance your performance in the military and help ensure successful reintegration when you return home.

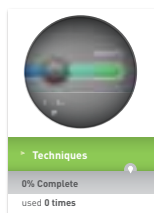
SRTS combines expert knowledge, cutting-edge neuroscience, and fun, interactive video games. Through SRTS, you will gain knowledge that will change how you see the world, as you acquire important, new, resilience-building skills.

You will learn how to prepare, perform, and quickly recover.

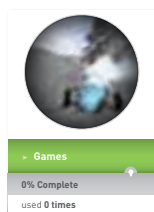
SRTS is self-paced and designed for a wide range of learning styles. We strongly encourage you to take advantage of the software's structure by starting with the *Know How* section, followed by the *Techniques* section, and then the physiology-controlled *Games* section.



The **Know How** section provides a wealth of information about stress and resilience.



The **Techniques** section introduces the “Coherence Advantage,” a proven training program that teaches you how to bring yourself into the best mental and physiological state for building resilience and performing at your best.



In the **Games** section, you will learn how to apply resilience skills by playing games that are driven by the actual Coherence of your physiology. This will help you achieve mastery of the techniques you will learn in the *Coherence Advantage* training section.

The games become easier to control and win as you learn to master the techniques that allow you to achieve the physiological state called Coherence.

The training is self-paced, so you can leave and come back at any time. Just enter your user name to return to where you left off. The Adaptive Coach will keep track of your progress and advise you on how to achieve resilience mastery.

CONNECTING YOURSELF TO THE SOFTWARE

1



A sensor collects your heart rate information and sends it to the computer through the EmWave Adapter to interpret your Coherence raw data.

2



Simply insert the adapter into your computer's USB port, and then attach the clip firmly to your earlobe. Your computer can now receive data and apply it to the SRTS software.

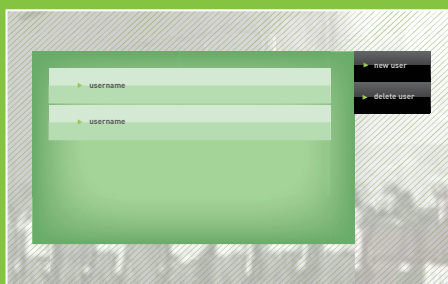
3



If you experience problems getting a good signal, the software will sense it, and the Adaptive Coach will let you know.

Remember: The SRTS software will not function properly if you are NOT connected.

USER SETUP



User setup window

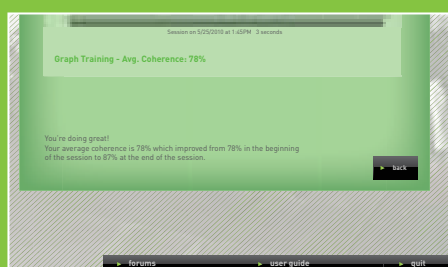
"New User," then create your user name. Each subsequent time you launch the SRTS software, click that name to return to your session. **You can create more than one user.**



DELETE USER

Select "Delete User" to select and delete unwanted user name(s).

THE SRTS ADAPTIVE COACH



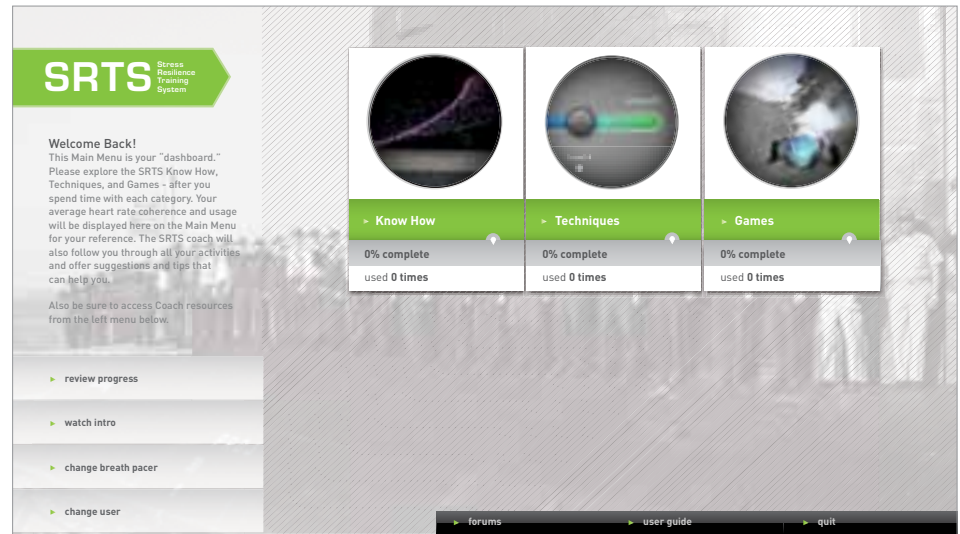
Adaptive Coach close-up

As you progress through SRTS, the Adaptive Coach will be there to help you along. Whether you're a step behind or a step ahead, the Adaptive Coach pop-up windows will prompt you with tips that will keep you progressing. Be sure to read each Adaptive Coach pop-up to get some sound advice.

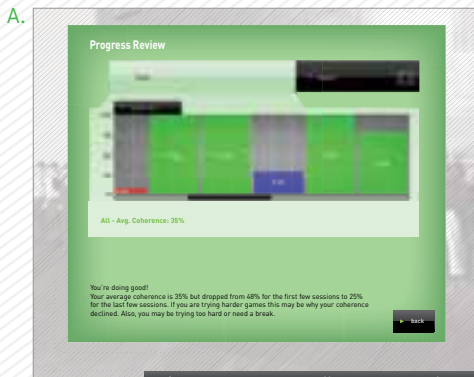
MAIN MENU

The Main Menu serves as your “Dashboard.” From here, you can explore each section of the software. After you’ve spent some time with each category, your average heart rate, Coherence, and usage will be displayed for your reference. The SRTS Coach will follow your progress and offer tips and suggestions as you go along.

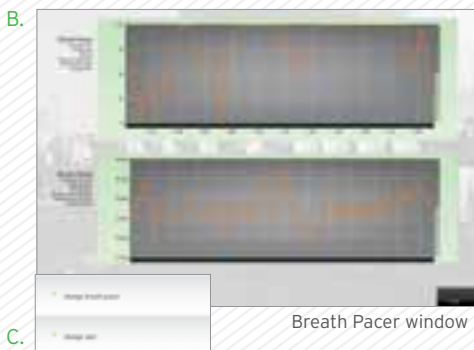
Aside from the three main categories (*Know How, Techniques, and Games*), the other options found on the Main Menu include:



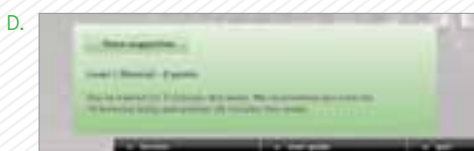
SRTS Main Menu



Progress Review window



Breath Pacer window



Suggestion window

REVIEW PROGRESS

The Progress Tracker allows you to see how well you’re progressing, and specifies the aspects of your training that need improvement.

In the “Progress Review” window **A.**, you can view how your heart rate and Coherence is changing over time. Click the “session bar” to review an individual session. To review sessions of a certain type, choose a specific type using the “History” drop down option.

WATCH INTRO VIDEO

Watch the SRTS Introduction video.

CHANGE BREATH PACER

SRTS uses breathing techniques to improve the Coherence of your physiology. The Breath Pacer’s default setting is 7.5 seconds, the required amount of *seconds per breath*. Use the Breath Pacer slider option **B.** to make that amount of

time higher or lower. The higher the setting number, the more challenging it will be.

CHANGE USER

This option **C.** returns you to the “User” window, where you can select an existing user name from the list or create a new user using the “New User” option. You can also use the “Delete User” option to remove unwanted user names.

SHOW SUGGESTIONS

If you’re not sure how to proceed, you can select this option for some guidance **D.**

USER GUIDE

Open and view the SRTS User Guide.

QUIT

Close the SRTS software.

STRESS RESILIENCE TRAINING SYSTEM (SRTS)



Know-How Section



Techniques Section



Games Section

KNOW HOW

The *Know How* section of the SRTS software is a series of videos that will introduce you to the main focus of the training program: *Stress and Resilience*.

The videos detail what stress and resilience are, why they're important, and how to use this training in every phase of your mission.

To complete the *Know How* section of the SRTS software, we recommend that you watch the *Intro* video, followed by four other videos that detail *Resilience*, *Preparation*, *Performance*, and *Recovery*. When you move your mouse over a video, a prompt will let you know if that video option has been completed.

*Baseline Shifting

The *Baseline Shifting* section is interspersed with biofeedback-driven exercises that will help you achieve Coherence. Following the first video, the Adaptive Coach will walk you through the process of getting yourself into a state of Coherence. After the second video, you can put those skills to the test as you attempt to bend the spoon using your Coherence level. All three videos and both exercises will prepare you for active duty and help you progress using SRTS.

TECHNIQUES

The *Techniques* section of the SRTS software is a collection of videos that will help you understand Coherence and learn why it is a necessary component of resilience strength training.

By completing the *Techniques* section, you will learn the methods to achieve and maintain Coherence, how it is applied in the real world, and how your emotional state affects others—on duty, on leave, and at home.

The goal is to develop and maintain a new baseline of increased resilience.

The videos you will watch in the *Techniques* section include: *Coherence Advantage*, *Physiology of Stress*, *Baseline Shifting**, *Emotional Shift and Reset Overview*, *Emotional Shift and Reset Technique*, and *Respond and Recover*.

GAMES

Playing with Biofeedback

The games in the SRTS software are connected to your internal physiology via the ear clip and USB adapter. A sensor collects your heart rate information and sends it to the computer to interpret your Coherence raw data. The SRTS software uses your biofeedback (physiological information) to power the game. As you learn the techniques that allow you to achieve the physiological state called Coherence, the games become easier to control and win.

It's a good idea to consistently spend time with the easier games to solidify your new baseline. You may notice that on some days, playing may be easier than other days. It's best to keep playing and practicing.

GAMES CONTINUED

Graph Training

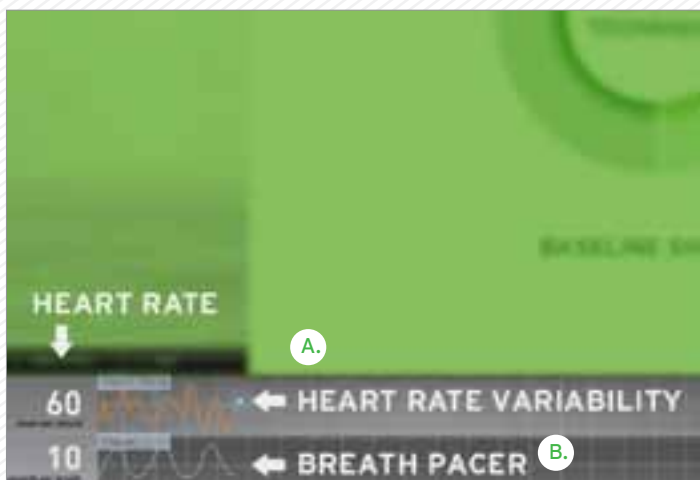
Graph Training allows you to put the knowledge you've learned from the SRTS *Know How* and *Techniques* sections to the test. This is where you will train yourself to reach a level of Coherence that will allow you to move forward to the more difficult games.

At the bottom of the "Graph Training" window are your "beats per minute" and "seconds per breath." To the right is your "Average Coherence."

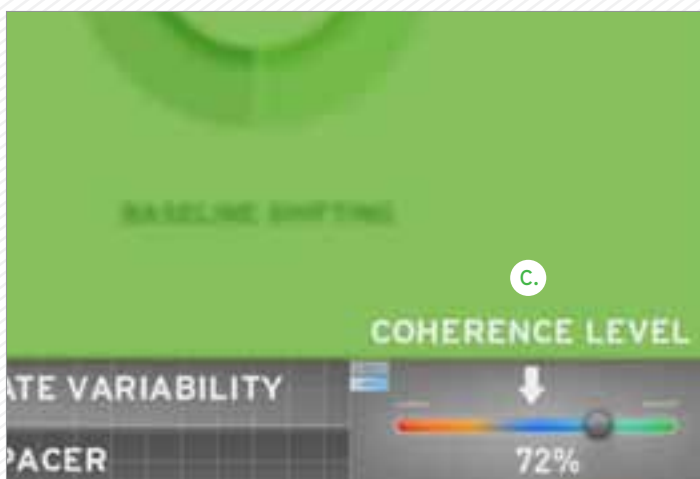
The "choose graphs" pull-down menu allows you to switch graph views. Other views include "Accumulated Coherence" graphs and "Special" graphs.



Absolute Heart Rate Graph



Heart Rate Variability and Breath Pacer found in the HRV bar



Coherence level in the HRV bar

Heart Rate Variability (A.)

Your heart rate speeds up and slows down a little bit with each heartbeat. The measured change in the beat-to-beat heart rate is called Heart Rate Variability (HRV). An irregular HRV graph is a sign of Incoherence. The smoother the curves of your Heart Rate Variability, the higher your state of Coherence.

Seconds per breath (B.)

This is the Breath Pacer. To best achieve a state of Coherence, you will need to inhale and exhale in "x" amount of seconds, based on the setting you select.

By default, the amount of seconds per breath is set at 7.5 seconds. The idea is to inhale and exhale one breath in that set amount of seconds. It is better to focus most of your time on a long exhale. This process will help you achieve a higher state of Coherence.

To adjust the seconds per breath setting, click on the "+" and "-" located to the left of the number. There is an optimum breathing rate for each person. To help you find your optimum rate, go to the "Optimize Breath Pacer," located in the *Main Menu*, under "Change Breath Pacer."

Average Coherence (C.)

The higher the percentage, the closer you are to a heightened state of Coherence. The meter ranges from Incoherent (red) to Coherent (green). The smoother and higher percentage you can achieve, the closer you will be to a high level of Coherence.

Choose Graphs (Specifically for instructor version software)

There are three graphs you can choose to view as you train:



Accumulated and Spectral Graphs

1

Absolute Heart Rate

This graph displays your heart rate only.

2

Accumulated Coherence

This setting breaks into three graphs: Heart Rate, Accumulated Coherence, and Your Time in Different Zones of Coherence. Numbers on the sides and/or bottom of each graph will give you a good indication of your accumulated Coherence. The idea is to work toward a consistently high state of Coherence.

3

Accumulated and Spectral Graphs

This setting adds a Frequency Spectrum graph to the Accumulated Coherence setting. This gives you a very detailed view of how frequently, and therefore consistently, you are maintaining a level of Coherence.

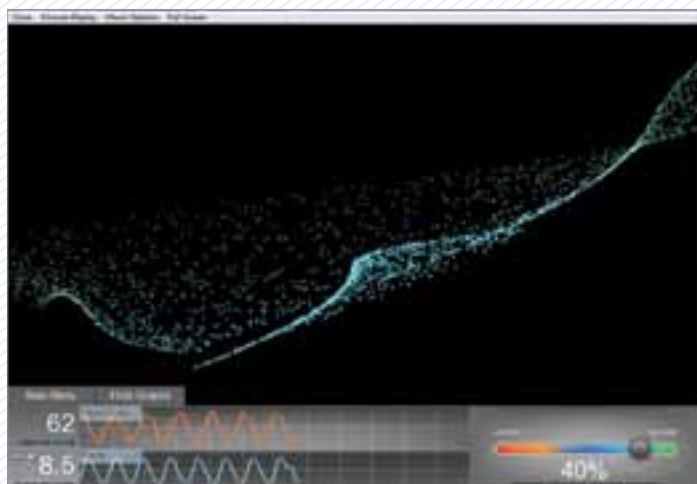
Environments

The *Environments* game is a collection of effects and video clips that your body's physiology will control, based on your state of Coherence. On-screen instructions will tell you what you need to do in order to successfully master these games.

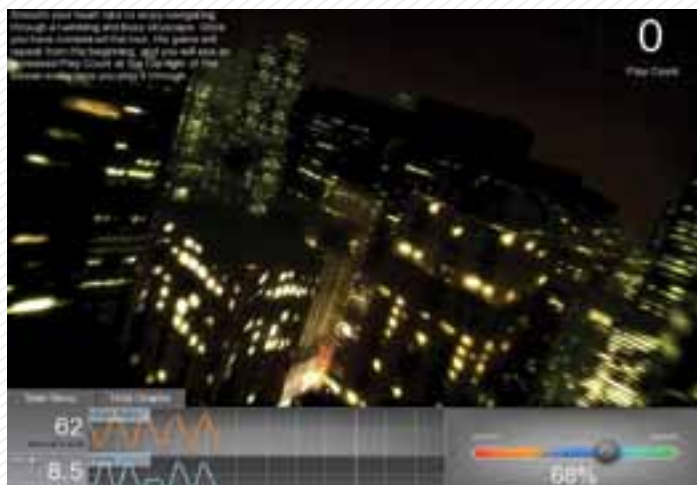
As you play the games, your "beats per minute," "seconds per breath," and "Average Coherence" are displayed at the bottom of the screen. At the top of the screen, there are options that allow you to select a specific display or choose your own music.

Mini-Games

The *Mini-Games* allow you to use your newly acquired breathing skills to affect what you see on-screen. As you move your mouse over an effect or video clip, instructions will tell you what you need to do in order to play the game successfully.



Breath Spirals Environment



Night Flight Mini-Game

Dual Drive™ Auto Pilot/Manual

Dual Drive Main Menu

To jump right in, simply select “Start Mission,” then choose from nine different tracks. The “Multiplayer” option allows you to play against a friend via LAN server. Within the “Options” menu, you can make changes to options related to racing, graphics, and audio.

Autopilot

In this version of the *Dual Drive* game, you will drive the vehicle using solely your state of Coherence. The higher your state of Coherence, the more controlled and faster your car will race.

If you start slipping into low Coherence, you will find the vehicle harder to control. If this happens, use the techniques you’ve learned to bring yourself back into a higher state of Coherence. You will then regain better control of the vehicle

Manual

Dual Drive Manual is a complete racing game found in the SRTS software, complete with a list of controls and adjustable options.



Dual Drive main menu



Dual Drive vehicle selection



Dual Drive gameplay

These are the Dual Drive default controls:

Action	Control
Toggle Cruise Control	Right Shift Key
Accelerate	W Key or Cursor Key Up
Brake/Reverse	S Key, Cursor Key Down or Right Mouse Button
Turn Left	A Key or Cursor Key Left
Turn Right	D Key or Cursor Key Right
Reset Car	Ctrl + R Key

Half-Life® 2

Once you've mastered the process of achieving a high state of Coherence, you're ready for the most difficult game available in the SRTS software, *Half-Life 2*!



Half-Life 2 gameplay



Half-Life 2 gameplay

You will find this game difficult if you haven't attained a high level of Coherence, so make sure you spend enough time within the other areas of SRTS to prepare yourself.

How to get the Game

There are two ways to get the game on your computer:

1

Through a internet-based download purchase (recommended).

Internet Download Instructions:

1. In a web browser, go to:
<http://store.steampowered.com>
2. Click "Install Steam."
3. Run the Steam installer. When it's finished and Steam opens, you must purchase *Half-Life 2*. It can be found on the "Games" page under the "Library" category. This will begin the download of *Half-Life 2* (Be certain you're downloading *Half-Life 2*, and not one of the variations).
4. Once *Half-Life 2* begins downloading (or after it finishes downloading), install Source SDK Base 2006. It is also located under the "Library" category on the "Tools" page.
5. *Half-Life 2* should now work in SRTS.

2

Using a DVD hardcopy of the software.

(If you elect to order a hardcopy of the software, refer to the DVD ordering procedure included in your SRTS packaging).

Using a DVD Hardcopy:

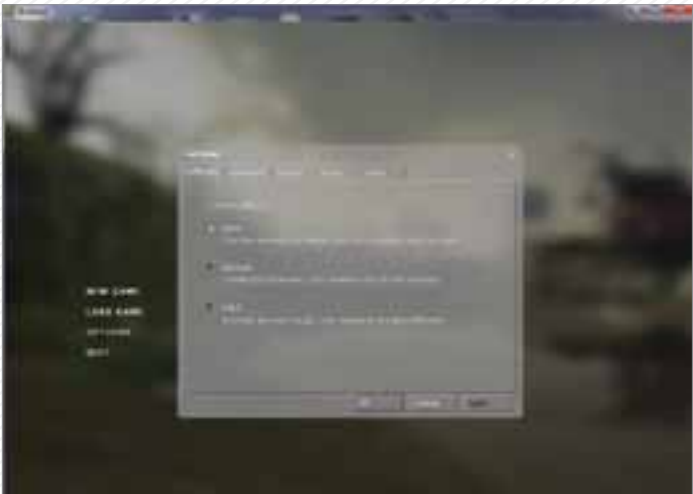
1. Insert the *Half-Life 2* DVD in the DVD-Rom drive. Follow the prompts to start the download.
2. Follow the instructions given in the DVD case for proper install.

Note: You might be prompted to install source SDK 2006 from the Steam website, as described to the left.

How to Play

Click “New Game” once *Half-Life 2* is loaded. Each level is marked *Easy*, *Medium*, or *Advanced*. Choose a level based on your gaming skills and familiarity with *Half-Life 2*, then click “Start New Game” to begin. If you get stuck, or want to change levels, press the “Escape” (Esc) key then click “New Game” to play a new level.

After playing for ten minutes you will be switched to feedback mode. In feedback mode, you will see heart rate graphs at the bottom of the screen. If your heart rate is smooth, your health will constantly regenerate, and you can slow time by pressing the “Shift” key. If your heart rate is uneven, the screen will flash red and your health will decrease.



Level of difficulty option window

Half-Life 2 Controls:

Action	Control
Move	W, A, S, D Keys
Run	Shift Key
Slow Time	Shift Key + Continued Coherence
Jump	Spacebar
Pause/Exit	Escape (ESC)
Use, Pickup, Open Door	E Key
Reload	R Key
Flashlight	F Key
Fire Weapon	Left Mouse Button
Fire Grenade	Right Mouse Button
Turn	Move Mouse Left/Right
Weapon	Keyboard Control
Crowbar/Gravity Gun	1 Key
Pistol	2 Key
Machine Gun	3 Key
Shotgun	4 Key
Grenade/Rocket Launcher	5 Key (some large creatures are hurt only by rockets)
Bug Bait	6 Key (controls bugs if present)



FREQUENTLY ASKED QUESTIONS

What is the Stress Resilience Training System (SRTS)?

SRTS is a training tool that teaches you to build resilience to the stresses of military life. SRTS combines expert knowledge, cutting-edge neuroscience, and fun, interactive games.

How will SRTS benefit me?

Through SRTS you will gain knowledge that will change how you see the world, and you will acquire important new resilience-building skills. What you learn using SRTS will enhance your performance in the military, and will help ensure successful reintegration when you return home.

How does stress affect my everyday life before and after my service?

Stress is our mental, physiological, and emotional response to situations that challenge our capabilities. Stress is sometimes dramatic, as when dealing with the risk of death or injury in combat. But stress is a part of every day life, such as job troubles or relationship worries. Whatever the source, preventing stress from becoming a more serious problem is highly recommended.

Won't dealing with stress and using SRTS be a sign of weakness?

Absolutely not. The Navy has taken the importance of stress regulation very seriously and now provides an Operational Stress Control program for sailors and their families. An essential aspect of resilience is recognizing and dealing with stress problems early on. This is a sign of strength, whereas not dealing with stress effectively is a sign of weakness.

What is Stress Resilience?

Stress Resilience is a process, through exercise and practice, that can better prepare you to deal with different types of challenging or stressful situations. It can help you learn how to prepare, perform, and recover more quickly.

What is Coherence as it relates to SRTS?

Coherence helps build resilience to keep you ready for action and optimize your performance in challenging situations. Mastering self-regulation skills is the best way to achieve and maintain a high state of Coherence.

What is biofeedback as it relates to SRTS?

The games in SRTS are connected to your internal physiology via the ear clip and USB adapter. A sensor collects your heart rate information and sends it to the computer for interpretation of your Coherence raw data. SRTS software uses your physiological information to power the game. As you learn the techniques that allow you to achieve Coherence, the games become easier to control and win.

Can I play the games without being connected via ear clip and USB adapter? Without biofeedback?

Without your biofeedback, the games will launch, but they won't play properly. We strongly suggest that you connect the ear clip and USB adapter, so you can experience the SRTS at its full potential.

What is the Adaptive Coach?

Adaptive Coach pop-up windows will prompt you with tips that will keep you progressing through SRTS. Be sure to read each Adaptive Coach pop-up to get sound advice.



TROUBLESHOOTING

The program won't install.

- Eject the DVD, then make sure it's clean. Insert it again and try to install.

The program won't open.

- Check the system requirements to make sure your computer is able to run the SRTS software.
- Uninstall the software, then reinstall it.
- Make sure you're selecting "SRTS" from the program choices on the Windows "START" menu.

The computer is not reading my biofeedback.

- Remove the ear clip to make sure it's clean, then reattach it to your ear.
- Adjust the clip on your ear to make sure it's connected properly.
- Check your USB connection. Make sure the USB adapter is completely inserted into your USB port.
- Restart the SRTS software.

I'm having a difficult time increasing my Coherence.

- Review the *Techniques* section.
- Spend more time with the basic games.
- Practice.

The games won't play correctly.

- Make sure your biofeedback is being read by the ear connector.
- Make sure your Coherence is at a high level. If it is low, the games won't play as smoothly as you like.

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